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## Novel Snowy Egret Foraging Behavior

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**ABSTRACT.**—We observed five Snowy Egrets (*Egretta thula*) on 23 October 2005 swimming and feeding in a small constructed wetland in Boca Raton, Florida. This event occurred 5–10 m from the shoreline in water >1 m in depth over a 2-hr period. We provide the first detailed account of *swimming feeding* behavior for Snowy Egrets. Elevated numbers of prey fishes at the surface of the pond may have facilitated this previously undocumented feeding behavior of Snowy Egrets. *Received 21 November 2005. Accepted 28 July 2006.*

Snowy Egrets (*Egretta thula*) have been reported to use an assortment of foraging behaviors previously defined by Kushlan (1976), Willard (1977), Kasner and Dixon (2003), and

Kelly et al. (2003). Kelly et al. (2003) described 34 foraging behaviors, of which Snowy Egrets used 29, detailing their plasticity when feeding. *Swimming feeding* remains one of the five published wading bird foraging behaviors that Snowy Egrets have not been documented using, although Great Egrets (*Ardea alba*), Great Blue Herons (*A. herodias*), Tricolored Herons (*E. tricolor*), and Green Herons (*Butorides virescens*) have used this behavior (Kushlan 1976, Willard 1977, Kasner and Dixon 2003, Kelly et al. 2003).

We observed five Snowy Egrets *swimming feeding* on 23 October 2005 from 1700 to 1900 hrs EST in a small (~5,000 m<sup>2</sup>) constructed wetland in a housing subdivision in Boca Raton, Florida (26° 21' N, 80° 04' W). Snowy Egrets and Tricolored Herons used *swimming feeding*, where they flew 5–10 m from shore, landed in the water and proceeded

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to capture fish on or within 5 cm of the surface while swimming. Both species extended their head under the water at least 15 cm on several occasions. Snowy Egrets and Tricolored Herons appeared to be successful in capturing fish with each attempt, but we did not quantify capture rates. Fish captured by both Snowy Egrets and Tricolored Herons using this technique were approximately 3 cm long on average based on heron bill lengths (Frederick 1997, Parsons and Master 2000). Both species would take off and fly to the shoreline after capturing prey, where they either rested or began feeding along the water's edge. The Snowy Egrets were foraging in a mixed flock (~20 birds) of Great Egrets, Tricolored Herons, and Wood Storks (*Mycteria americana*). All species were observed feeding along the shoreline but Great Egrets, Snowy Egrets, and Tricolored Herons also foraged in the open water, using either *plunging* (all three species) or *swimming feeding* (Snowy Egret, Tricolored Heron) behaviors.

Numerous small (<5 cm) fish were observed surfacing during the period that Snowy Egrets and Tricolored Herons used the *swimming feeding* behavior. The surfacing behavior of the fish may have been due to emerging aquatic insects, unobserved piscine predators, or perhaps low dissolved oxygen levels, requiring surface respiration by fish (e.g., mosquito fish, *Gambusia* spp.). This pond was normally aerated to prevent growth of algae but our observation occurred during an electrical power outage, which may have result in lowered dissolved oxygen levels. Searcher species are well suited to locating and exploiting ephemeral food patches (Gawlik 2002), possibly caused by the power outage. Kersten et al. (1991) showed that Little Egret (*E. gar-*

*zetta*), a similar species in appearance and behavior (Parsons and Master 2000), quickly exploited increased prey availability resulting from anoxic water conditions that occurred for only a short period of time each day. The frequency of this feeding behavior in Snowy Egrets is apparently quite low, as it was previously undocumented and likely does not have an important role in prey acquisition except under such exceptional circumstances.

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